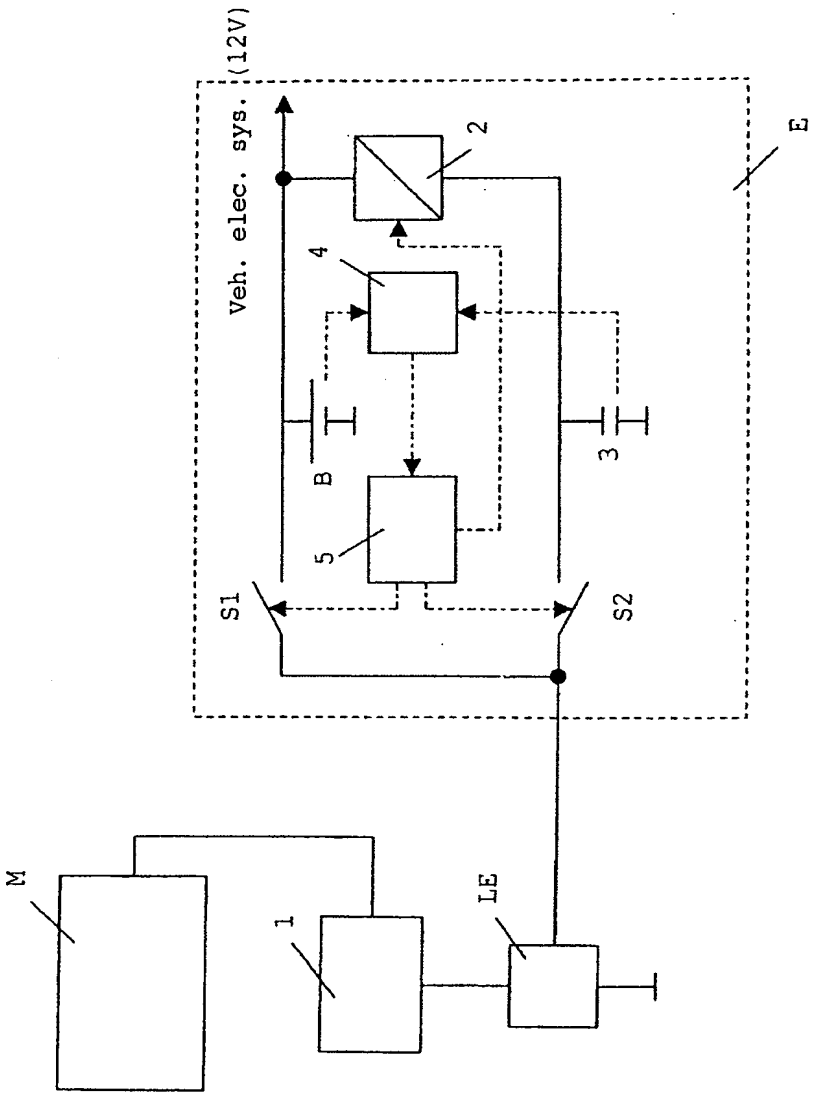

Fig. 1

	Uc = 0V (Ucap empty)		Uc = 9 V (DC/DC converter)		Uc = 12V (desired OP)		Uc = 15V (Ucap full)	
SOC	< 70%	≥ 70%	< 70%	≥ 70%	< 70%	≥ 70%	< 70%	≥ 70%
0 - Initial start	Ucap: - Batt: Start + Veh. elec. sys	Ucap: - Batt. Start + Veh. elec. sys	Ucap: - Batt: Start + Veh. elec. sys	Ucap: - Batt: Start + Veh. elec. sys	Ucap: Start Batt: Veh. elec. sys	Ucap: Start Batt: Veh. elec. sys	Ucap: Start Batt: Veh. elec. sys	Ucap: Start Batt: Veh. elec. sys
1 - Boost	Ucap: - Batt: Veh. elec. sys	Ucap: - Batt: Boost + Veh. elec. sys	Ucap: - Batt: Veh. elec. sys	Ucap: - Batt: Boost + Veh. elec. sys	Ucap: Veh. elec. sys Batt: Charge batt	Ucap: Boost Batt. Veh. elec. sys	Ucap: Veh. elec. sys Batt: Charge batt	Ucap: Boost Batt: Veh. elec. sys
2 - v = const.	Ucap: - Batt: Veh. elec. sys + Charge batt	Ucap: Rekup. Batt: Veh. elec. sys	Ucap: - Batt: Veh. elec. sys + Charge batt	Ucap: - Batt: Veh. elec. sys	Ucap: Veh. elec. sys Batt: Charge batt	Ucap: - Batt: Veh. elec. sys	Ucap: Veh. elec. sys Batt: Charge batt	Ucap: Veh. elec. sys Batt: -
3 - Recup.	Ucap: Recup. Batt: Veh. elec. sys	Ucap: Recup. Batt: Veh. elec. sys	Ucap: Recup Batt: Veh. elec. sys or Ucap: - Batt: Recup.	Ucap: Recup. Batt: Veh. elec. sys	Ucap: Recup. Batt: Veh. elec. sys or Ucap: - Batt: Recup.	Ucap: Recup.+ Veh. elec. sys Batt: -	Ucap: Veh. elec. sys Batt: Recup.	Ucap: - Batt: Veh. elec. sys (from generator)
4 - Stop/Start	Ucap: - Batt: Start + Veh. elec. sys	Ucap: - Batt: Start + Veh. elec. sys	Ucap:- Batt: Start + Veh. elec. sys	Ucap: - Batt: Start + Veh. elec. sys	Ucap: Start Batt: Veh. elec. sys	Ucap: Start Batt: Veh. elec. sys	Ucap: Start + Veh. elec. sys Batt: -	Ucap: Start + Veh. elec. sys Batt: -

Fig. 2

10/547789

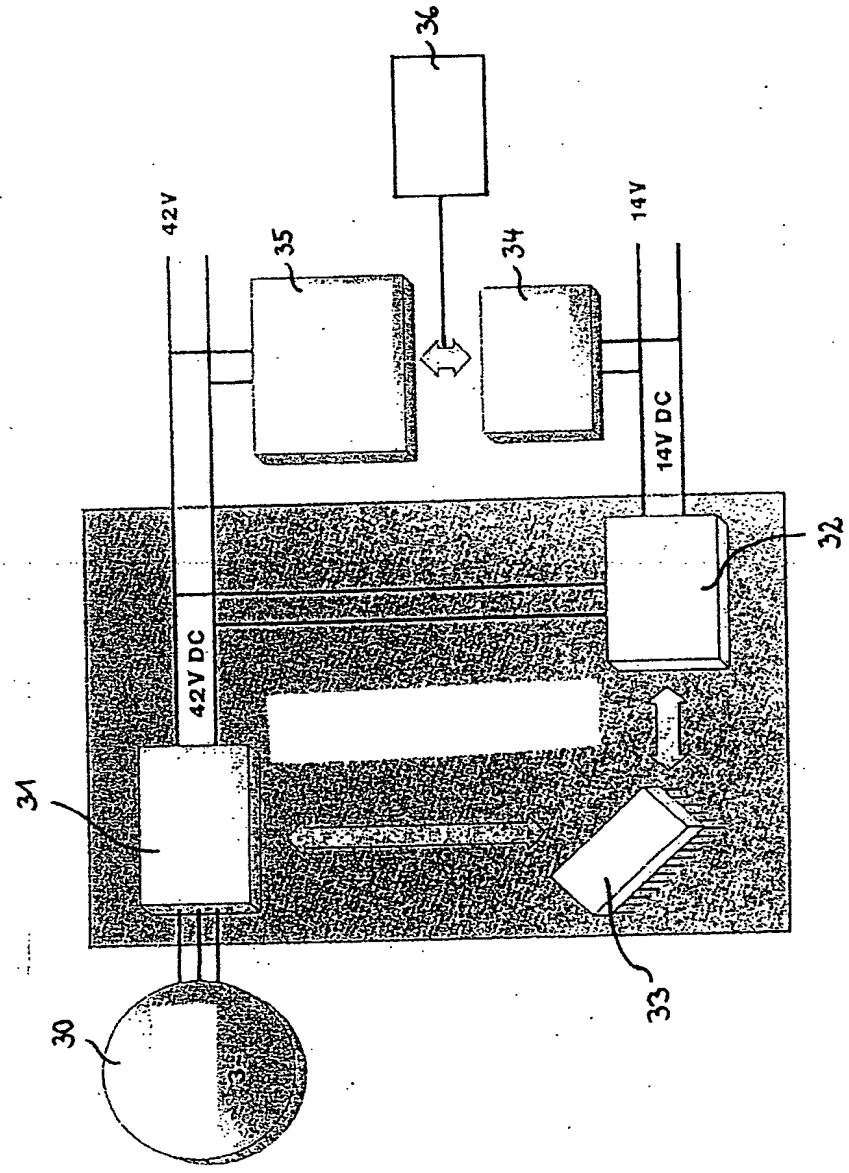

Fig. 3